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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,752	02/21/2002	Mario Vismara	163-381	9402

7590 08/20/2002

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EXAMINER

COLETTA, LORI L

ART UNIT	PAPER NUMBER
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3612

DATE MAILED: 08/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/081,752

Applicant(s)

VISMARA ET AL.

Examiner

Lori L. Coletta

Art Unit

3612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 February 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

Reference character **25** (page 8, line 9) is not shown in Figure 3A.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.

Art Unit: 3612

- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

3. The disclosure is objected to because of the following informalities:

"According to claim 1, which is here referred to for the sake of brevity" (page 3, line 12) needs to be changed to state what is claimed in claim 1.

Appropriate correction is required.

#### *Claim Objections*

4. Claims 1-7 objected to because of the following informalities:

Regarding claim 1, "first absorbing element or buffer" (line 4) needs to be changed to --first absorbing element --.

Regarding claim 4, "buffer" (line 3) needs to be changed to --absorbing elements--.

*See same deficiency in claim 5 (line 3).*

Appropriate correction is required.

#### *Claim Rejections - 35 USC § 112*

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3 "said cross member has a physical-geometrical structure and weight modified with respect to traditional type cross member" (lines 2-4) is not clear. What is meant by "said cross member has a physical-geometrical structure and weight modified with respect to traditional type cross member"?

Regarding claims 4 and 5, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.  
See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3, 6 and 7, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Terada et al. 5,078,439.

Regarding claim 1, Terada et al. '439 discloses a protective structure for vehicles, characterized in that it comprises a front cross member (13) connected to lateral side members (14), featuring at least one first absorber element or buffer (2), connected externally after the cross member on the bumper side (3) of the vehicle.

Regarding claim 3, Terada et al. '439 discloses the protective structure for vehicles characterized in that said cross member (13) has a physical-geometric structure and weight modified with respect to traditional type cross members.

Regarding claim 6, Terada et al. '439 discloses the protective structure for vehicles characterized in that said cross member (13) is flat. It would be inherent that the cross member (13) is made of metal or plastic. The method of forming (extruded linear profile) the device (the cross member) is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

Regarding claim 7, Terada et al. '439 discloses the protective structure for vehicles characterized that the cross member (13) is flat. It would be inherent that the cross member (13) is made of metal or plastic. The method of forming (molding and welding) the device (the cross member) is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2 and 4, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Terada et al. 5,078,439 in view of Shiotani et al. 3,842,944.

Regarding claims 2 and 4, Terada et al. '439 discloses the protective structure for a vehicle having said cross member (13).

However, Terada et al. '439 does not show inside said cross member, at least one second absorber element is present, increasing the collapsing force of the cross member and therefore the energy absorbed and, simultaneously, limiting the overall dimension of the entire structure.

Shiotani et al. '944 teaches an energy absorbing efficiency of a metallic shock absorber having a hollow structure can be remarkably increased by filling the hollow space with a foamed product of a metal.

Regarding claims 2 and 3, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the protective structure for vehicles of Terada et al. '439 with a second absorber inside the cross member, as taught by Shiotani et al. '944, in order to provide increased the energy absorbing efficiency of the protective structure.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Terada et al. 5,078,439 as applied to claim 2 above, and further in view of Carbone et al. 3,744,835.

Regarding claim 5, Terada et al. '439, as modified, discloses the protective structure for vehicles but does not show that said first and second buffers comprise absorbing materials such as extruded thermoplastic honeycomb, honeycomb made of aluminum, polyurethane foam, foamed polypropylene, rigid or semi-rigid polyurethane or extruded polyurethane.

Carbone et al. '835 teaches a honeycomb core (16) constructed of plastic or aluminum.

Regarding claim 5, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the first and second buffers of the protective structure for vehicles of Terada et al. '439, as modified, out of a honeycomb made of aluminum, as taught by Carbone et al. '835, in order to provide light weight and high strength which is capable of absorbing impact shocks occurring during slow speed automobile collisions.

Art Unit: 3612

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references show several other protective structures for vehicles similar to that of the current invention.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lori L. Coletta whose telephone number is (703) 306-4614.

The examiner can normally be reached on Monday-Friday 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on (703) 308-3102. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3597 for regular communications and (703) 305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1134.

Lori L. Coletta  
Examiner  
Art Unit 3612

llc  
llc  
August 13, 2002



8/14/02

D GLENN DAYOAN  
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